## Abstract

The invention relates to an aqueous polymer composition containing at least one aqueous bitumen dispersion and at least one aqueous dispersion of at least one polyurethane obtained from a polyol component which contains at least one hydroxylated polydiene, a method for the preparation thereof by simply mixing two aqueous dispersions, and the use of said composition in several applications such as the productions of surface dressings, waterproof layers applied underneath road surface dressings, watertight roof coatings, road surface dressings, and sound damping and shock absorbing or insulating coatings. Bitumen that has been modified according to the inventive method has a very high threshold and improved mechanical properties. The inventive aqueous dispersions is also stable during storing and makes it possible to obtain a film by simply evaporating water.